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ABSTRACT

This study guide is intended to help researchers conduct and write research that can be used by the practitioner. The contents include: "The Origin of the Document"; "The Utilization of the Document"; "Products of National and International Significance"; "The Matrix of This Study Guide: How to Keep Educational Research from Gathering Dust on a Library Shelf"; "Knowledge Evaluation Pretest"; "Performance Evaluation Pretest"; "Attitude Evaluation Pretest"; "Underutilizing Research and Overutilizing Research"; "Can a Research Project Have More Than One Objective?"; "Some Steps You Can Take to Make Sure That Your Research Doesn't Just Sit on the Shelf"; "Developing Professional Contacts with Your Readers"; "Getting Research Off the Dusty Library Shelf"; and "Sources of Additional Information." (WR)

TITLE:

Selected Extracts from

HOW TO KEEP EDUCATIONAL RESEARCH

FROM GATHERING DUST

ON A LIBRARY SHELF

AUTHOR:

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2004

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THE ORIGIN OF THIS DOCUMENT

The author of this document is exposed by the nature of his work to critical questions from various audiences : from busy administrators and teachers who wish to understand research without necessarily becoming statisticians, from scholarly experts who wonder why busy administrators and busy teachers do not listen to their sage counsels, from graduate students and their advisors who want to get funding for ideas that are interesting to full time students but not to the typical philanthropic foundation, and from fellow researchers who feel they know a little about a lot of topics and are ready to keep on learning.

Each of these critical audiences asked questions that were difficult to answer when one got down to issues and to situations beyond generalities. The answers given on these occasions are not repeated here. That would be a multi-volume tome. Here you will find a common thread running through each question and answer.

This conviction boils down to the belief that THERE IS A FIRM CONNECTION BETWEEN EDUCATIONAL RESEARCH AND PRACTICE. In other words, both researchers and practitioners want RATIONALITY, OBJECTIVITY, SYSTEMATIZATION, AND ANSWERS. These answers must be based upon the available evidence.

THE UTILIZATION OF THIS DOCUMENT

QUESTION----------This page is intended to ask the question, "What will my readers want to do with my findings and methods?" in such a way as to go beyond the researcher-centered inquiry, "What do I want to do with my research?"

ANSWER----------

KNOWLEDGE OBJECTIVES

The reader should be able to :

SYSTEMATIZE THE DATA he reads in this research survey

TRANSLATE THE INFORMATION he reads about in this document into better research designs

PERFORMANCE OBJECTIVES

The reader should be able to :

WRITE RESEARCH SUMMARIES in a format that will interest more readers in less time than undigested conclusions

VISUALIZE FOR OTHERS exactly what can be done with the results obtained elsewhere

TRANSPLANT HIS RESEARCH either *in toto* or in part to places where it will take root

ATTITUDE OBJECTIVES

The reader should be able to :

VALUE ACCURACY in gathering data and in interpreting it in an understandable fashion

STRESS THE ACTUAL FACTS he discovers in his research the way they are and *not* in the way he would want them to be

MAKE RESEARCH THE BASIS FOR SIGNFICANT DECISIONS fully aware of the dictum that decisions are only as good as the information upon which they are based

PRODUCTS OF NATIONAL AND INTERNATIONAL SIGNIFICANCE

Educators want things they can use; these usable items are immediately transplantable into another program. Such usable items go one step beyond useful items, which might fit in somewhere: maybe, as objectives (DIMENSION "O"),
or as evaluations (DIMENSION "E"),
or as resources (DIMENSION "R").

Each one of these dimensions is subdividable into domains, such as
the knowledge domain (cognitive) (DOMAIN "K"),
or the performance domain (psychomotor) (DOMAIN "P"),
or the attitude domain (affective) (DOMAIN "A").

Most researchers ask, "What do I want to do with my research?" instead of inquiring, "What will my readers want to do with my findings and methods?"

Thus, they write research which is vital to the researcher and merely interesting or literary or scientific to the reader.

To avoid, to remedy, and to anticipate this difficulty, researchers are urged to identify any part of any research with nine codes : KO, KE, KR, PO, PE, PR, AO, AE, AND AO. The next page does it for this research page by page.

KO = Knowledge Objective
KE = Knowledge Evaluation
KR = Knowledge Resource
PO = Performance Objective
PE = Performance Evaluation
PR = Performance Resource
AO = Attitude Objective
AE = Attitude Evaluation
AR = Attitude Resource

TRAINING MATRIX OF THIS STUDY GUIDE

KO	PO	AO
KO-1: Penetrate the needs of others (page 11) KO-2: Assess willingness to change (page 11)	PO-1: Change when necessary (page 11) PO-2: Get your research off the dusty library shelf (page 20)	AO-1: Be willing to help (page 11) AO-2: Achieve results (page 11)
KE	**PE**	**AE**
KE-1: KE Pretest (page 5) KE-2: Simplify your introduction (page 6) KE-3: Anticipate applications (page 17)	PE-1: PR Pretest (page 6-7) PE-2: Simplify your vocabulary (page 16) PE-3: Develop professional contacts (page 18)	AE-1: AE Pretest (pages 8-9) AE-2: Develop feedback with reader (page 16) AE-3: Be flexible (page 17)
KR	**PR**	**AR**
KR-1: Can a research project have more than one objective? (pages 12-14) KR-2: Develop the generalist's point of view (page 20) KR-3: Write in for more information (page 23)	PR-1: Some steps you can take to vitalize your research (page 15) PR-2: Talk about daily problems (page 19) PR-3: Point up some possible changes (page 22)	AR-1: Under-utilizing and over-utilizing research (pages 10-11) AR-2: Find out what readers can't do for themselves (page 21)

KNOWLEDGE EVALUATION PRETEST

Directions: For the following questions, look at the title of the document under study. You may use the document upon which this study guide is based, or you may use any other research study you wish to apply to your own classroom teaching. Answer each question by circling "yes" or "no".

YES NO 1. Is the title too long?

YES NO 2. Does skimming rapidly through the book make you feel that this study is much too statistical for you?

YES NO 3. Is there something about the thickness of the book that makes you feel that this research project is much too technical?

YES NO 4. Does the mentioning of a specific city or state or province in the title make you conclude that this book cannot apply to you since you live elsewhere geographically?

YES NO 5. Does the date of the research cited in the title lead you to conclude that this material is outdated?

YES NO 6. Does the date of publication lead you to believe that more time was given to the statistical analysis of the data than to the actual gathering and application of the data?

YES NO 7. Is there indication somewhere in the title or the inside cover of where you can write to get other copies or additional information?

YES NO 8. Is there an indication somewhere in the title page or inside page of the phone number you can call to get immediate answers to questions you might have about this document?

PERFORMANCE EVALUATION PRETEST

Directions: For the following questions, don't try to read the book. Pretend you are a reader who is picking it up, holding it in his hand, and trying to form a general opinion. Answer each of these questions with yes or no to express your opinion. Again you may use the research work being studied or another one of your choice.

YES NO 1. Is the inside cover blank?

YES NO 2. Pick up a popular magazine. Is the inside cover filled with a high price advertisement to attract your attention?

YES NO 3. Do you find anywhere in the obvious locations (front cover, front inside cover, back inside cover, back cover) any indication of the main ideas of this research and how you can use it?

YES NO 4. Does this research seem desi ned for you if you lived in an ivory tower of doing nothing but research all day long?

YES NO 5. Does this research seem designed for you if you are busy all day long with a large group of students?

YES NO 6. Is there anything in the physical appearance or size of the book that attracts your attention.

YES NO 7. Is there anywhere obviously pinpointed that gives you a very brief overview of the content?

YES NO 8. Is the document much too thick to be conveniently carried by you?

YES NO 9. Can you think of any logical reason why this book was printed on one side only?

YES NO 10. Flip to a typical table. Do you find right next to this table an explanation of the results that are contained therein?

YES NO 11. Does the format and style of the table inspire you to spend the necessary time needed to understand it?

YES NO 12. Do you find any graphs or other interesting illustrations that will immediately attract your attention with the most important message of the book?

YES NO 13. Is the table of contents analytical enough to get its main point across to you in a few minutes?

YES NO 14. Is the table of contents merely descriptive?

ATTITUDE EVALUATION PRETEST

Directions: Look over the objectives of this study. In this particular document the objectives are contained on pages 1 to 6. You may use the following questions with any set of objectives in order to find out how you react to the purposes proposed by the author or authors. Mark your indications with yes or no.

YES NO 1. Does the very first paragraph of the text explicitly state the objective of the research?

YES NO 2. Does the very first paragraph or paragraphs give only a very vague introduction to the objectives?

YES NO 3. Early in the statement of objectives themselves are you introduced to a miscellany of factual data that is not directly connected to the objectives?

YES NO 4. Are each of the objectives or goals of the study numbered?

YES NO 5. In each of the goals of the study is the action verb underlined?

YES NO 6. In each of the goals of the study is the action verb centered upon you the reader?

YES NO 7. In each of the goals of the study is the action verb centered upon the author or authors?

YES NO 8. Is the action verb of the objectives clear to you?

YES NO 9. Does the linking of one objective to another appear logical to you?

YES NO 10. Does merely reading the objectives suggest to you a number of practical applications?

YES NO 11. Is there anything in the objectives to make you think that the claims of the author or authors have been proven?

YES NO 12. Is every technique used to attain these objectives clearly defined?

YES NO 13. Are the objectives presented in such a way that their ramifications can be clearly seen?

YES NO 14. Do the objectives of the research clearly indicate a number of viable alternatives?

UNDER-UTILIZING RESEARCH AND OVER-UTILIZING RESEARCH

The consumers of research are doomed to stagnation IF they change too slowly.

The consumers of research are doomed to desecration IF they change too rapidly.

This constant paradox of teaching is something that must be faced squarely by every practitioner. This choice of what to do and when to do it is something that cannot be decided by a researcher isolated from your classroom or school situation.

Try out a few yes-no questions to make this point clearly.

YES NO 1. Three highly personal interactional situations are marriage, teaching, and medicine.

YES NO 2. Each one of these interactions can be seen in three different ways: (a) doing FOR, (b) doing TO, and (c) doing WITH.

YES NO 3. The model of DOING FOR can be seen in the case of the omniscient, omnipotent, and active doctor, teacher, and spouse doing everything for the unknowing, weak, and passive recipient.

YES NO 4. This model presupposes that the knowledge objective of the teacher is to be omniscient.

YES NO 5. This model presupposes that the performance objective of the teacher is to be omnipotent.

YES NO 6. This model presupposes that the attitude objective of the teacher is to be active.

YES NO 7. The model of DOING TO presupposes a psychological, distorted, and symbiological relationship.

YES NO 8. The knowledge objective of this model is to register the psychological needs of each other.

YES NO 9. The performance objective of this model is to distort the needs of the other to make them complementary with one's own needs.

YES NO 10. The attitude objective of this model is to develop interpersonal symbiosis.

YES NO 11. The model of DOING WITH presupposes a cooperative relationship rather than the classical relationship of DOING FOR and the curious relationship of DOING TO.

YES NO 12. The knowledge objective of this model requires each participant to penetrate the needs of the other, to assess the willingness of the other person to change, and to relate to one another.

YES NO 13. The performance objective of this model requires each participant to stand by, to change as necessary, and to respect the other.

YES NO 14. The attitude objective of this model requires a mutual calm, a willingness to help, and a readiness to achieve results.

As you the reader go through a piece of research, you must ask yourself the following questions.

1. What is this research DOING FOR me?
2. What is this research DOING TO me?
3. What is this research DOING WITH me?

Answering these three questions will help you avoid the pitfalls of changing either too slowly or too rapidly.

CAN A RESEARCH PROJECT HAVE MORE THAN ONE OBJECTIVE?

This question is more than rhetorical. It is asking a very practical question that has at least two subcomponents, on the knowledge level.

YES NO KE-1: It is better to answer one question accurately rather than answer ten questions inaccurately.

YES NO KE-2: It is better to divide one's resources among a large number of questions rather than to concentrate all of one's resources on one question.

YES NO AE-1: The results of research are designed for the specialist.

YES NO AE-2: The results of every piece of research may not appeal to every educator.

YES NO AE-3: The objective of a specific piece of research should be general enough to make it interesting to at least 60% of the educators in a given geographical area.

YES NO PE-1: The educational researcher should be willing to take care of hundreds and hundreds of loose ends.

YES NO PE-2: The educational researcher should not work harder, but smarter.

YES NO PE-3: No piece of educational data should be left out of the final report.

YES NO AE-4: There should never be any blank space left on a research questionnaire.

As is obvious from the above evaluation questions, the knowledge evaluation questions 1 and 2 have many implications in the area of attitude evaluation and performance evaluation.

It would be very difficult to give an answer key to the above yes-no questions that would satisfy the majority of any group of educators that could be assembled without stacking the deck.

Most pieces of educational research start off with one clearly defined objective. This objective is usually enough to get the project funded and the personnel interested. As time goes on, secondary considerations come to the forefront.

People begin to think that as long as they are sending out a questionnaire, they might as well add on three, four, five, six, or twenty other pieces of information that would be interesting to have.

Sometimes, this is a good idea. After all, curiosity is a legitimate motive.

The difficulty with this last paragraph and its assumption is the fact that adding on questions to a questionnaire has the effect of adding on unnecessary objectives to a piece of research. After a while, it becomes impossible to identify for certain the precise objective of a particular study.

Without prejudice, it can be said that adding on objectives to a piece of research is like growing flowers without sitting down to weed out undesired plants. It's a fact of life that weeds grow faster in the garden than the flowers. This doesn't mean that the weeds should be left there. A good researcher, like a good gardener, must sit down and periodically weed out nonessentials.

If the researcher doesn't do this, the nonessentials will grow and grow all over the place. In time, the nonessentials made choke out the resources necessary to keep the main objective alive. When this happens, a valuable piece of research is liable to find itself in the category of a mediocre collection of miscellaneous items.

SOME STEPS YOU CAN TAKE

TO MAKE SURE THAT YOUR RESEARCH DOESN'T JUST SIT ON THE SHELF

Here are some steps you can take to activate your research. If you carry through on these steps, you can be certain that someone somewhere will find a use for your carefully designed and carefully executed research.

People who know a lot don't always rise to places of prominence. The reason is simple: Their knowledge has never been put into practice.

Some of the people who know a lot rise to relatively great prominence because they have written. They may not have put their ideas into practical applications, but at least they have put their ideas into words. These words have been put into books. The books have been produced, sold, and distributed. At least something happened in the economic community of book publishing to make their ideas more well known.

As a researcher, you want to do more than know a lot. You want to do more than write books. You want to improve education. Here are a few simple steps that may get you going in the right direction.

Remember, in the area of applying knowledge, it's not enough to memorize these steps. It's not enough to know them on a high level of cognition. As a matter of fact, you probably already know them EVEN THOUGH you don't apply them now. Applying them in simple and obvious ways is the secret of making your research much more practical.

Probably, everything you have done in research is useful. In other words, it could be applied. Very often, the trouble is that your research is not usable. In other words, the classroom teacher is not using your research simply because your research was not designed for usability. Usability demands more than thorough scholarship. It demands publicity and a practical set of directives on how to use your product. Here they are!

STEP 1: Take another look at the introduction to your research.

(A) If there are no objectives for your research stated in the introduction, write down one good clear objective that ties things together. This objective should tell the reader something he can do with your research.

(B) If you have too many objectives, find the most important objective. Place the other objectives in order. Or, if you feel braver, forget about them. Let the reader find out about the secondary objectivesin a later section.

STEP 2: Look at the vocabularyused in the body of your article.

(A) If the vocabulary is difficult, write up a glossary. This glossary should explain every piece of terminology that is not part of the layman's everyday vocabulary.

(B) If you already have a glossary, make it more practical. Under each word used in your article that has a unique definition, place a small notation at the end of each definition. This notation should give an example or an illustration of something the reader can do with this new piece of terminology. In other words, you want to improve his vocabulary, but more importantly, you want to improve his reperteire.

STEP 3: Provide some type of feedback system between you and the reader.

(A) There are many mechanical ways to do this. You can rely on such things as programmed texts, a series of questions and answers, self-evaluational instruments, and other types of feedback systems.

(B) Give the reader a place he can write to for more information. If you do this, have something ready to send to the reader before you make such an announcement. It might be a simple bibliography or it might be additional information. If you are providing mainly bibliographies or information, between the time you write the article and the time it gets published, you might try to come up with a concrete application of what you have written about. Don't try to do this all at once. Every week or so write down five or six sentences that pithily sum up what you are trying to achieve in improved educational instruction or learning. After a while, you will be amazed how practical and helpful these short incisive summaries are to you and to the readers.

(C) Once you start establishing contact with your readers, try to preserve their reactions in short significant statements. This collection of a wide variety of points of views will give you the type of feedback you need to improve your product. It will also give you an indication of which way the wind is blowing. This is the ideal source of insight for your next redaction of the original research text.

STEP 4: After the above three steps, ask yourself, "Have I a good idea of what's to be done with my research?"

(A) Think of the example of the teacher who intended to turn out craftsmen in his high school occupational program. He had the students for two and a half hours per day, one hundred and sixty days a year. The objective of turning out a skilled and employable craftsmen is admirable. The resources used to attain this goal are simply inappropriate because they are inadequate. Two and a half hours per day is made even smaller by the bite of setting up the shop and the bite of cleaning up the shop afterwards. Such a noble goal must have more adequate resources.

(B) It's the same way with a magazine article. Don't expect to change the lives of every reader with two or three pages. Lest you be let astray, don't expect to change the life of a reader by making your article longer and longer. The longer your article, the less likely it is to be read.

(C) There is a simple way to improve your reader. Start applying what you preach in day-to-day experiences. Let your review or magazine article be a resumé of something you have done, not merely something you have written. In this way, your readers will be put in touch with a living tradition of resources ready and willing to help them. This is one way to make sure your research doesn't gather dust lying on a shelf.

STEP 5: Be flexible. Allow your research to absorb other research. Also, allow your research to be absorbed by other research.

(A) If the reader of your article has to employ your suggestions in such a way that each application says MADE IN ELSEWHERE, then you can be certain that the reader will never feel involved.

(B) Present your research in such a way that it doesn't imply importing all good ideas from foreign countries or from other states. Let your research by the first step to a world-wide perspective on the part of your reader.

(C) If you do this, you will find out that the research you develop is being used elsewhere. You will not feel the shock of having to use research developed by others. This will avoid the manipulation of pre-made and pre-thought products that really don't fit the needs of the reader.

(D) With flexibility, even when the skills are the same, school practices are allowed to differ.

DEVELOPING PROFESSIONAL CONTACTS WITH YOUR READERS

GUIDELINE 1:

Make sure your guidelines are suggestions, not orders. Don't pretend to have all the answers.

GUIDELINE 2:

Provide a number of feedback mechanisms. These can be the mail, meetings, phone calls, or other sources of personal contact. Make it obvious that you are searching with your reader for the best possible ways to elicit valid data and valid reactions.

GUIDELINE 3:

Stress the matching of performances and timeframes. This will help you and others to make next year's planning more realistic.

GUIDELINE 4:

Do more than pass on printed material. Pass on organized and carefully edited materials. It's similar to the success of a great speaker at a large meeting. He doesn't say everything to everyone. He selects carefully those sentences and those examples that will best help him achieve the objectives for which he is striving.

GUIDELINE 5:

Sometimes researchers try to make their findings more dramatic than justified by publication in a journal. This artificial dramatization has at least one bad side effect: It makes the writer forget the many daily activities he does that could interest a wide variety of readers. After a while, a researcher finds out that his audience is not interested at all in his spectacular discovery. His audience is interested in the many findings that have become part of the life style of the researcher. These small activities, whether they be a certain way of processing data, of handling 3 x 5 cards, of summarizing bibliographies, of working with a computer, of giving orders to one's subordinates, of using forms or directives, of imparting advice, or of other such matter constitute the main concerns of your audience. They don't want to hear an awful lot about your extraordinary activities. They are interested in what you do as a normal part of the operation.

GETTING RESEARCH OFF THE DUSTY LIBRARY SHELF

What you the researcher do will have an impact upon what the reader will do after reading your material. In order to make the most of this impact, you must preplan it. Here are a number of suggestive guidelines that may help you get your research more action-oriented.

ACTION 1:

Your readers should be ready and willing to tap all available resources.

A. Using resources is a performance objective.

B. The readiness to tap all available resources is founded upon a specific knowledge objective. The reader must know where to go. If you spell out specific resources you have tapped, you are giving the reader a model he can imitate. Don't omit such details because you consider them too pedestrian. These are precisely the details the reader wants to get from you. If you can't include them in the article, have these details ready for the follow-up information.

C. The willingness to tap all available resources is an attitude objective. This attitude tells the reader to go beyond his efforts. It tells the reader to go beyond the local efforts of his school. It gets him thinking in terms of a regional plan. This development of a plan is much better than a plan that comes down from the central offices to all the remote regional centers.

ACTION 2:

Your readers won't change their viewpoint from specialists to generalists overnight.

A. Everyone is a specialist because he understands his job better than anyone else. In this sense, even a generalist is a specialist at being a generalist.

B. Slogans can either become valid knowledge objectives or remain empty phrases. This is true about the title of your research article. You must make it a slogan that sums up a viable piece of educational improvement. Otherwise, your research is doomed to literary analysis, not action application.

C. Habits can be seen as lazy repetition of the same old thing or as viable performance objectives. Habits require more than knowledge, they require practice. This practicing must not be counted, it must be weighed. In other words, quality of the habit is more important than quantity. If you try to tell the reader to do a 100 different things as a result of reading your article, you are stressing quantity over quality. Give him one good suggestion, and let him try it out. If it works, he'll come back for more either by reading other articles you have written or by getting in touch with you for more details.

D. Prestige can become either an empty search for fame or a significant attitude objective. The type of procedure you want to instill in your researcher is that which makes him proud of his work and proud of his success measured from a professional point of view.

ACTION 3:

Be aware of your qualities and deficits as an educational leader.

A. No matter how learner-centered we get, there is still much the teacher can do for the learner.

B. No matter how reader-centered you get, there is still much you the researcher can do for the teacher that he can't do for himself.

C. Here are some things you can provide the reader with that he might not be able to provide for himself:

1) A valid clear and precise statement of goals and objectives.

2) An assortment of evaluation instruments that help the reader measure his progress in quantifiable terms.

3) Spell out the timetable in terms of established check points whereat the reader can measure his progress.

4) In all the resources you give him, stress continuity and integration. The reader should not be lead into the fallacy of relying on the add-on effect.

D. In everything you give to the reader, make sure you are giving him decision-making situations and choice-making situations rather than a number of obedience test situations. In other words, the reader must be allowed to improvise and adapt to his local situation.

ACTION 4:

Don't make the mistake of presuming that your research can apply to every possible classroom situation.

A. You know that given enough time and enough money, you can apply your research almost everywhere. Don't fall into this fallacy.

B. Don't try to do something for everyone. Be specific in your target population. This means: specify exactly those readers who seem most likely to apply the research you have done.

C. Even while you're conducting your research, involve teachers, educators, and laymen in the planning and leadership process. In this way, you will be able to ascertain the most likely target population for your research.

ACTION 5:

Realize that your readers need and want a way to change.

A. Very little happens automatically in education. Without manageable, identifiable, and measurable objectives, the typical reader of your research will be completely lost about what to do.

B. You must be certain you are developing something new. It doesn't have to be entirely new, but a new slant will help. This is much better than advocating the same old activities, with the same old personnel, with the same old concerns, and with a new source of funding or a new source of inspiration.

C. The label you choose to identify your research doesn't matter too much. You must provide better choices. Give your reader a number of choices among viable options.

D. In order to make sure that dollars and energy aren't anticipated on wild schemes, stress the priorities of what you are doing. In this way, you will have one overall model that can be modified to fit many different situations.

For the complete text of this document,

or for the answers to the various tests and exercises,

send a SELF-ADDRESSED

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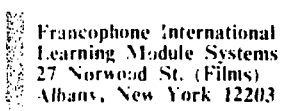

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